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Editor in Chief Jason He
Water Environment Research (***WER***)
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Re: Request for correction or retraction of the article "Organism Detection in Permeable Pavement Parking Lot Infiltrates at the Edison Environmental Center, New Jersey." A. Selvakumar; T. P. O'Connor (2018) *Water Environ. Res.*, **90**, 21-29.

Note: This letter is **not** a "Letter to the Editor" as that term is used in the ***WER*** Author Guidelines.

Dear Editor in Chief Jason He:

As a New Jersey WEF member since 1980 who has been active in stormwater management for the past 30 years inside and outside State government, I am particularly interested in ***WER*** Research Articles, such as the subject article, about stormwater related research performed in New Jersey. One of my main concerns is that, in the words of the ***WER*** Author Guidelines, such Research Articles are "fully documented and interpreted accounts of significant findings," "present an accurate account of the research performed by the authors," and "contain sufficient detail ... to permit the authors' peers to repeat the work." In my opinion the subject article does not in some major respects meet these criteria due to several important errors in this article. Almost all of these errors are undetectable except to someone like me who has examined the unpublished USEPA research data from which the results published in this article were in principle derived.

Accordingly, and in accordance with the following excerpt from Wiley's Publication Ethics Guidelines, I am notifying ***WER*** that (i) I have found in the subject article several errors that in my opinion are important and affect the interpretation of data and information presented in this article; and (ii) I am requesting ***WER*** in light of these errors to publish a correction or retraction of this article.

CORRECTIONS

Journals should encourage readers and authors to notify them if they find errors, especially errors that could affect the interpretation of data or information presented in an article. When an error is identified:

- Journals should work with authors and their publisher to correct important published errors.

- Journals should publish corrections when important errors are found, and should consider retraction when errors are so fundamental that they invalidate the work.

- Corrections arising from errors within an article should be distinguishable from retractions and statements of concern relating to misconduct.

Please find enclosed a copy of my March 19, 2019 letter to Dr. Selvakumar about these errors and my suggestion that she submit a "Correction" to the subject article. Her June 3, 2019 e-mail reply (copy enclosed) stated "I have decided not to submit anything as it will not affect the conclusions at all. As I told you, we are very busy planning the research for next 5 years." Obviously, I do not agree with her decision.

(My March 19, 2019 letter also said I would submit a "Comment" about this article for publication in ***WER***. I currently think it is more appropriate for me to request from ***WER*** a correction or retraction before I submit a "Comment," which ***WER*** now calls a "Letter to the Editor.")

## A CATALOG OF IMPORTANT ERRORS

Following are the primary errors discussed in my March 19, 2019 letter to Dr. Selvakumar. As noted in that letter, my review of pertinent information, including U.S. Environmental Protection Agency (USEPA) files provided in response to my requests under the Freedom of Information Act (FOIA)[1], focused on indicator organism values for surface runoff (16 storm events) at the two curb cuts (CC4 and CC5), and on associated weather data.

For more details and documentation, see this link to my "Edison stormwater study cloud" folder containing pertinent files:

https://1drv.ms/f/s!AqWLnhXjVjSJ2A_rWprxni7-Foe5

This folder includes (i) a "USEPA Edison stormwater FOIA" subfolder, which contains USEPA files and letters responding to my FOIA requests (for example, the "Raw data-Temperature-

[1] The subject article included no data availability statement. USEPA does not have any project report, other than the subject article, that discusses the methods and results of the research summarized in that article. The FOIA process was the only way I could obtain and distribute USEPA research data from which the published results were derived.

Rainfall.xlsx" and "bldg_205_060916.xlsx" files); and (ii) a "WM Edison stormwater files" subfolder, which contains files I created in the course of reviewing the subject article. For example, in regard to the discussion below of rainfall amounts and the dates and times of rainfall and sample collection, see, in the latter subfolder, the "WM (date) rainfall and CC sampling.xlsx" file series (one file for each of the 16 storm events), the "WM rainfall, temperature, and CC sampling.xlsx" file (which summarizes information for the 16 storm events), and related comments in the "readme" file.

The errors cataloged below are found in multiple parts of the subject article, including:

- The description (for surface runoff) of how samples were collected and how published indicator organism values were derived.

- Some of the summary statistics in Tables 1, 2, and 3 of indicator organisms in surface runoff (and percent concentration reductions in Table 6).

- Weather data in Figures 4 and 5 and the article's "Effects of Weather" paragraphs.

## Errors consisting of failure to disclose important information

The following errors consist of the subject's article failure to disclose, about the following topics, certain information necessary for accurate description and proper interpretation and use of results reported in the subject article. (I do not know if the article submitted to ***WER*** included any of this information.)

**Topic: Describing (for surface runoff) how samples were collected (or not collected), and how published indicator organism values were derived**

**Undisclosed information:**

A. For CC4, no samples were taken at two storm events (one each in August and September 2015), and default indicator organism values of "<1" (MPN/100 mL) were used in this absence of sampling.

   Also, for some CC4 and CC5 samples, the indicator organism value of ">24196" (MPN/100 mL) reported by the laboratory was changed to "24196" (MPN/100 mL).

   The above information makes it clear that for surface runoff, some of the "summary statistics" indicator organism values in the subject article were probably below values corresponding to those actually present in some of the collected samples, and that to this extent this article provided conservatively low estimates of indicator organism concentrations reductions for permeable pavement infiltrates.

B. For CC5 at one of the November 2015 storm events (and for some other locations at two other events), there was a grab sample (taken at an unknown time) rather than the "flow-weighted samples ... collected using programmable automatic samplers" described in the subject article.

   This information raises concern that indicator organism concentrations based on a grab sample taken at an unknown time might be less representative of a storm event than those based on flow-weighted samples of that event.

**Topic: Interval between storm events**

**Undisclosed information:**

C. One of the December 2015 storm events would not have qualified as eligible under USEPA's NPDES permit application regulations for industrial stormwater discharges, because this storm event was not "at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event" (40 CFR 122.21(g)(7)(ii)).

   This information alerts readers that indicator organism concentrations in this storm event might have been substantially affected by washoff or other phenomena during the preceding storm event. (This circumstance does not mean this storm event should have been excluded from the subject article. Storms in quick succession are a reality appropriately included in this kind of research.)

   (Specifically, the first rain gauge tip of the "12/18/2015" storm event was on 12/17/15 at 10:38 AM (EST), which was less than 60 hours from the last rain gauge tip of the 6.8 mm "12/15/2015" storm event on 12/15/2015 at 1:48 AM (EST).)

**Topic: Relationships between times when rainfall occurred and times when surface runoff samples were collected**

**Undisclosed information:**

D. In nine storm events (for CC4) and four storm events (for CC5), more than 4.0 mm of rainfall occurred **before** the first flow-weighted CC4 or CC5 sample was taken. In four storm events (for CC4) and two storm events (for CC5), more than 8.0 mm of rainfall occurred **before** the first flow-weighted CC4 or CC5 sample was taken. (The maximum such rainfall was 9.7 and 11.9 mm for CC4 and CC5, respectively. See the rainfall table in item F below. I chose 4.0 mm as a criterion because 4.0 mm exceeded the **total** rainfall of the "8/21/2015" storm event.)

   This information is important because depending on the nature of the catchment and the sample collection system, the samples collected might not have directly included a considerable first part of the storm event, but might have indicator organism

concentrations substantially affected by washoff or other phenomena in the first part of the storm event.

E. Conversely, in one of the September 2015 storm events (specifically, the "9/11/2015" storm event), 8.9 mm of rainfall occurred **after** the last flow-weighted CC5 sample was taken (no CC4 sample was taken in this storm event). This early termination of sampling meant that the measured indicator organism concentrations did not account for almost the entire second half of this 19.7 mm storm event.

**Additional comment:**

The information outlined in the preceding items D. and E. raises concern about the extent to which the measured flow-weighted CC4 and CC5 indicator organism concentrations were representative of entire storm events, and whether measuring CC4 and CC5 indicator organism concentrations representative of entire storm events was important to this study.

## Errors in "Effects of Weather" paragraphs and Figures 4 and 5

**Erroneous rain depth values**

F. The second and third sentences of the first "Effects of Weather" paragraph said that "Rain depth ranged from 3.4 to 39.4 mm with the mean size of 18.6 mm and median size of 19.7 mm. Rain depth is normally distributed as shown in Figure 4."

One problem with these sentences (and Figure 4) is that the "39.4 mm" value, which pertained to the "9/30/2015" storm event, appears to be incorrect. For reasons set forth in the "readme" file in the "WM Edison stormwater files" subfolder, I view this storm event as having begun with the "9/29/2015 1:00:32 PM" tip (and having ended with the "9/30/2015 8:21:48 AM" tip), which corresponds to a total rainfall of 44.0 mm.

The larger problem is that when read together with the first sentence of the first "Effects of Weather" paragraph, the second sentence is erroneous because on its face it applies to the "16 sampling events" mentioned in the first sentence when, in fact, rain depth was not calculated for the last three of those events (as stated in the USEPA "Raw data-Temperature-Rainfall.xlsx" file). Thus, the rain depth statistics presented in the second sentence applied to only the first 13 sampling events (which is consistent with Figure 4, which erroneously graphed 13 rather than 16 "observations"). When all 16 sampling events are considered (and the "9/30/2015" storm event is assigned a total rainfall of 44.0 mm), the mean and median rain depths are 20.6 mm and 20.3 mm, respectively, and Figure 4 is revised to graph all 16 "observations."

A separate issue is that a storm event's total rainfall is **not** the primary rain depth statistic of interest for the kind of evaluation summarized in the subject article. If, for example,

one objective is to evaluate the effect of a storm event's rain depth on the flow-weighted indicator organism concentrations measured at a sampling location in that storm event, and if the final sample at that location was collected **before** that storm event's rainfall ended, then the "total" rain depth that should be considered is **not** the storm event's total rainfall but the "total" rainfall up until the time the final sample was collected. Subsequent rainfall in that storm event could not possibly have affected the indicator organism concentrations measured at that location in that storm event.

As an example, for CC5 the "9/11/2015" sampling event is of concern because although "Total Rainfall" was 19.7 mm (last rain gauge tip on 9/11/15 at 3:58 AM), only 10.8 mm of that rainfall occurred before the last CC5 sample was collected on 9/10/15 at 11:32 AM. (See the "WM 9-11-15 rainfall and CC sampling.xlsx" file.) This means that the CC5 results pertain to only about the first half of the "9/11/2015" sampling event, and that in regard to rainfall, any statistical analysis of the CC5 results should use the 10.8 mm of rainfall that occurred **before** the last CC5 sample was collected, **not** the "Total Rainfall" of 19.7 mm. In regard to CC5 results for the "9/11/2015" sampling event, rain that occurred **after** that event's last CC5 sample was collected is as irrelevant as if the rain fell in Australia.

Using USEPA rain gauge tip files and the dates and times when the first last CC4 and CC5 samples were collected, I calculated the following rainfall statistics for the 16 storm events ("Date"[2] and "Total Rainfall (mm)" in the USEPA "Raw data-Temperature-Rainfall.xlsx" file are also shown for identification and comparison):

| "Date" | "Total Rainfall (mm)" | WM total rainfall (mm) | Rainfall (mm) before first CC4 sample | Rainfall (mm) before first CC5 sample | Rainfall (mm) before last CC4 sample | Rainfall (mm) before last CC5 sample |
|---|---|---|---|---|---|---|
| 7/30/2015 | 22.6 | 22.6 | 5.6 | 2.2 | 22.6 | 22.6 |
| 8/11/2015 | 21.3 | 21.3 | 9.5 | 1.4 | 21.3 | 21.3 |
| 8/21/2015 | 3.4 | 3.4 | No CC4 samples | 2.1 | No CC4 samples | 3.4 |
| 9/11/2015 | 19.7 | 19.7 | No CC4 samples | 2.8 | No CC4 samples | 10.8 |
| 9/30/2015 | 39.4 | 44.0 | 3.4 | 0.9 | 40.6 | 40.6 |
| 10/9/2015 | 10.8 | 10.8 | 3.5 | 0.8 | 10.0 | 9.7 |
| 10/29/2015 | 26.8 | 26.8 | 8.2 | 2.3 | 26.8 | 25.9 |
| 11/11/2015 | 11 | 11.0 | 4.0 | 1.5 | 9.9 | 8.1 |
| 11/20/2015 | 17.7 | 17.7 | 3.7 | grab sample* | 13.8 | grab sample* |
| 12/3/2015 | 15.1 | 15.1 | 8.6 | 8.2 | 14.9 | 14.9 |
| 12/15/2015 | 6.8 | 6.8 | 2.4 | 1.1 | 4.8 | 4.8 |
| 12/18/2015 | 26.4 | 26.4 | 2.6 | 1.4 | 26.3 | 26.3 |
| 12/30/2015 | 20.8 | 20.8 | 5.4 | 6.7 | 20.8 | 20.8 |

[2] As discussed under "Erroneous event temperature values," these calendar "Dates" do not correspond to the dates and times of storm event rainfall and sampling.

| "Date" | "Total Rainfall (mm)" | WM total rainfall (mm) | Rainfall (mm) before first CC4 sample | Rainfall (mm) before first CC5 sample | Rainfall (mm) before last CC4 sample | Rainfall (mm) before last CC5 sample |
|---|---|---|---|---|---|---|
| 1/11/2016 | did not calculate | 38.3 | 6.2 | 2.3 | 37.5 | 37.3 |
| 2/4/2016 | did not calculate | 14.3 | 6.1 (approx.) | 7.8 (approx.) | 14.2 (approx.) | 14.3 (approx.) |
| 2/25/2016 | did not calculate | 30.0 | 9.7 | 11.9 | 19.4 | 19.4 |
| | | | | *at unknown time | | *at unknown time |

**Erroneous event temperature values**

G. The second "Effects of Weather" paragraph begins with this sentence: "Event temperatures ranged from –1.1 °C to 26.4 °C with a mean of 15 °C and median of 13.58 °C (Figure 5) ..." (The Figure 5 caption is "Mean temperature on event days.") This sentence and Figure 5, which are consistent with the USEPA "Raw data-Temperature-Rainfall.xlsx" file, are erroneous because the dates and times when these temperatures were measured were **not** the dates and times of the "event."

With the exception of the "Date" of "9/11/2015" in that file, all "Average Temp" data in the USEPA "Raw data-Temperature-Rainfall.xlsx" file are identical to the average temperatures calculated using the USEPA "bldg_205_060916.xlsx" file for the calendar "Date" in the USEPA "Raw data-Temperature-Rainfall.xlsx" file. These calendar "Dates" do **not** correspond to the dates and times of storm event rainfall and sampling. For example, in five storm events, rainfall and runoff sampling (CC4 and CC5) ended the day **before** this file's "Date" value ("11/20/2015," "12/3/2015," "12/18/2015," "1/11/2016," "2/4/2016").

Any serious discussion of "event temperature" requires definition of this term. My definition, developed for purposes of my review of the subject article, applies to the objective of associating a storm event's temperature with the flow-weighted indicator organism concentrations at a particular sampling location in that storm event. In this context, I define "event temperature" as the temperature in the period that begins when that event's rainfall begins, and ends when the last sample in that event is collected at this location.

(Temperatures in the hours, days, or weeks **before** that event's rainfall began may well have affected indicator organism concentrations measured in that event, but these temperatures are part of antecedent weather conditions, not "event temperature." Temperatures occurring **after** that event's final sample was collected at that location could not possibly have affected the indicator organism concentrations measured at that location in that storm event.)

Using the USEPA "bldg_205_060916.xlsx" file and the dates and times when rainfall began and when the last CC4 and CC5 samples were collected, I calculated the following CC4 and CC5 "event temperatures" for the 16 storm events ("Date" and "Average Temp" in the USEPA "Raw data-Temperature-Rainfall.xlsx" file are also shown for identification and comparison):

| "Date" | "Average Temp" | Event Temp CC4 | Event Temp CC5 |
|---|---|---|---|
| 7/30/2015 | 26.09 | 28.45 | 28.51 |
| 8/11/2015 | 22.71 | 22.99 | 22.98 |
| 8/21/2015 | 26.03 | No CC4 samples | 25.38 |
| 9/11/2015 | 26.35 | No CC4 samples | 24.22 |
| 9/30/2015 | 22.02 | 23.21 | 23.20 |
| 10/9/2015 | 18.63 | 17.95 | 17.97 |
| 10/29/2015 | 18.17 | 18.18 | 18.42 |
| 11/11/2015 | 12.97 | 12.92 | 13.29 |
| 11/20/2015 | 11.49 | 17.13 | grab sample* |
| 12/3/2015 | 8.05 | 9.10 | 9.09 |
| 12/15/2015 | 14.27 | 17.82 | 17.76 |
| 12/18/2015 | 7.48 | 13.53 | 13.52 |
| 12/30/2015 | 6.88 | 4.66 | 4.71 |
| 1/11/2016 | -1.07 | 11.36 | 11.16 |
| 2/4/2016 | 10.81 | 14.35 (approx.) | 14.36 (approx.) |
| 2/25/2016 | 9.15 | 8.52 | 8.45 |

*at unknown time

For CC4 and CC5, "event temperatures" (as I define them) ranged from 4.66 °C to 28.45 °C and from 4.71 °C to 28.51 °C, respectively.

For more information about "event temperature," see, in the "WM Edison stormwater files" subfolder, the "Weather data for Date in USEPA file column heading.xlsx" file (which was prepared to investigate and try to replicate how the "Average Temp" values in the USEPA "Raw data-Temperature-Rainfall.xlsx" file were calculated); the ""WM (date) event temperature.xlsx" file series (one file for each of the 16 storm events); the "WM rainfall, temperature, and CC sampling.xlsx" file (which summarizes information for the 16 storm events); and related comments in the "readme" file.

**Invalid regression analyses**

H. This article's "Effects of Weather" paragraphs also stated:

> "... Least-square log normal regression analysis of rain depth and indicator organism concentrations for all the surfaces had low coefficient of determination ($R^2 \leq 0.33$) ...
>
> "... Least-squares log normal regression analysis of temperature and indicator organism concentrations for all three surfaces had low coefficient of determinations ($R^2 \leq 0.20$)."

The associated last sentence under "Conclusion" stated: "Rain depth and temperature did not appear to have any effect on either concentration of organisms or the performance of permeable pavement in this small data set; this observation should be confirmed with a larger data set."

Two reasons why those regression analyses were invalid are the errors, identified in items F. and G. above, in rain depth and temperature data used in those analyses. Another major source of error in these analyses was their use of default indicator organism values of "<1" (MPN/100 mL) for CC4 at two storm events where no CC4 samples were taken. Although these default "<1" values might legitimately be used in providing conservatively low estimates of indicator organism concentrations reductions for permeable pavement infiltrates, these default "<1" values have no place in analyses of the effect of rain depth and temperature on concentration of organisms.

In addition, there is a need to consider the implications for regression analyses of changing (for some CC4 and CC5 samples) the indicator organism value of ">24196" (MPN/100 mL) reported by the laboratory to "24196" (MPN/100 mL)

Moreover, it would not have been appropriate to include in these regression analyses measured organism concentrations that were not adequately representative of the part of the storm event that occurred before the last relevant sample was taken. CC4 and CC5 measurements that might fall in this category include those from the November 2015 CC5 grab sample, and those taken in instances where more than 4.0 mm (or even 8.00 mm) of rainfall occurred before the first flow-weighted CC4 or CC5 sample was taken.

(For more information about the above concerns about organism concentrations, see the discussion above of "Errors consisting of failure to disclose important information.")

Although a "correction" should disclose that the regression analyses discussed in the subject article were erroneous, I do **not** think it is necessary for a "correction" to provide new regression analyses in their place. I believe that the 16 storm event data set was too small for this purpose, especially in light of the absence of CC4 sampling at two of the four summer storm events; the unknown extent to which the ">24196" (MPN/100 mL)

indicator organism values exceeded 24196 (MPN/100 mL); the varying degrees to which measured organism concentrations were representative of entire storm events; and the potential complicating effects of other weather conditions including (i) each event's rainfall intensity; and (ii) antecedent weather conditions including temperature, relative humidity, solar radiation, wind speed, time since previous rainfall, and depth and intensity of previous rainfall.

## DISCUSSION

Now that Dr. Selvakumar has rejected my suggestion that she submit a correction to the subject article, ***WER*** faces a stark choice. ***WER*** can either leave this article untouched, notwithstanding the many important errors cataloged above, or ***WER*** can publish a correction or retraction of this article. The best course of action would be for ***WER*** to work with Dr. Selvakumar to correct this article's important errors, but if ***WER*** cannot obtain her cooperation, then ***WER*** should still publish a correction or retraction. (If possible, a correction should be accompanied by a data availability statement consistent with current ***WER*** Author Guidelines.) If this article is retracted (which may be warranted by the number and nature of the errors), I hope that ***WER*** later publishes a revised article with the important errors eliminated. ***WER*** might wish to consult with this article's reviewers in regard to these matters.

It is significant that Dr. Selvakumar has not disputed any data or calculations in my March 19, 2019 letter to her, or in my "Edison stormwater study cloud" folder referenced therein. Instead, she argues that correcting the subject article is unnecessary because "it will not affect the conclusions at all."

My first and most obvious objection to this argument is that such correction clearly **does** "affect the conclusions." This is most obvious in regard to the following sentence in the subject article's "Conclusion": "Rain depth and temperature did not appear to have any effect on either concentration of organisms or the performance of permeable pavement in this small data set; this observation should be confirmed with a larger data set." As documented above and in my "Edison stormwater study cloud" folder, this sentence in the "Conclusion" was based on invalid regression analyses whose serious defects included but were not limited to use of erroneous rain depth and temperature data. If those regression analyses are discarded (as they should be), all of the subject article's basis for this sentence in the "Conclusion" disappears.

Another example is the following sentence in the subject article's "Conclusion": "As expected, impervious driving lane runoff mean concentrations exceed BWQS [bathing water quality standard] for all microbial indicators." Readers interested in this sentence would generally also be interested in the magnitude of the exceedance, and in sampling and data handling protocols that might have affected these runoff mean concentrations. Corrections suggested in my March 19, 2019 letter would affect the interpretation of this sentence by making it clear that (i) these runoff mean concentrations (those printed in the published article) were probably below the means of concentrations actually present in some of the collected runoff samples; and (ii) some of the runoff concentrations used in calculating these mean concentrations were **not** derived from sampling of entire storm events.

I also have broader objections, however. I dispute Dr. Selvakumar's premise that errors in the subject article should not be corrected unless they "affect the conclusions." To paraphrase some pertinent language in the ***WER*** Author Guidelines, Research Articles are (among other things) a fully documented and accurate account of the research performed. If ***WER*** learns after publication that a Research Article (like the subject article) is in one or more major respects an inadequately documented and inaccurate account of the research, then ***WER*** is obligated to publish a correction or retraction, or risk losing ***WER***'s own credibility.

This is the case whether or not correcting the errors would "affect the conclusions." At least some readers of Research Articles are not interested solely in authors' "conclusions." Some readers may, for example, be interested in comparing or combining research data referenced in the Research Article (for example, surface runoff indicator organism data used in preparing Tables 1 to 3 of the subject article) with research data (in this example, runoff indicator organism data) obtained at other times or places, or in using research data referenced in the Research Article for purposes separate from authors' "conclusions" (for example, estimating numbers of indicator organisms discharged to receiving waters). Such readers expect and deserve a fully documented and accurate account of the research performed, irrespective of the specific wording of authors' "conclusions."

Suppose, for example, that the subject article had presented rain depth and temperature information simply to describe conditions under which the samples were collected, with no attempt by the authors to estimate the effect of rain depth and temperature on concentration of organisms or performance of permeable pavement, and with no reference to rain depth and temperature in this article's "Conclusion." If this rain depth and temperature information is erroneous it should be corrected anyway. I believe that many of this article's readers want accurate information about the rain depth and temperature conditions under which the samples were collected, regardless of what if anything this article's "Conclusion" says about these conditions.

My view is that all known, nontrivial errors in a Research Article's account of the research performed should be corrected. Such errors include errors in research data or summaries or graphs thereof; errors in describing how research data were obtained, handled, or analyzed; and errors in describing conditions under which research data were obtained. (I am generally not referring here to errors in spelling, grammar, and the like.)

For their part, Wiley's Publication Ethics Guidelines emphasize correction of "errors that could affect the interpretation of data or information presented in an article." Such errors are **not** limited to those that "affect the conclusions." Moreover, many of the errors I cataloged above are more basic than errors that could affect the **interpretation** of data or information — they are errors **in** data or information presented in the subject article.

As for Dr. Selvakumar's statement that "we are very busy planning the research for next 5 years," my response is that one of the most fundamental obligations of a Research Article author is to provide a fully documented and accurate account of the research performed. Her statement is like an aircraft manufacturer saying to a customer that the manufacturer is too busy designing

the next aircraft to fix defects in the aircraft that the manufacturer recently delivered to that customer. In any event, however, if she continues to refuse to correct errors in the subject article, then ***WER*** should publish a correction or retraction of this article. (I am willing to draft such a correction.) ***WER*** should not leave untouched this article, which, in regard to the issues discussed in this letter, falls far short of the standard that should apply to any ***WER*** Research Article, or any other journal's research article, or any United States government research publication.

***WER*** should feel free to contact me to ask any questions about or discuss this letter or anything in my "Edison stormwater study cloud" folder. I request that ***WER*** inform me whether ***WER*** will publish a correction or retraction of this article. If the answer is "no," then I will submit a "Letter to the Editor" (pursuant to the ***WER*** Author Guidelines) about the subject article, and may take other actions to draw attention to this article's many errors.

Sincerely,

/s/

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Enclosures

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